

1/31

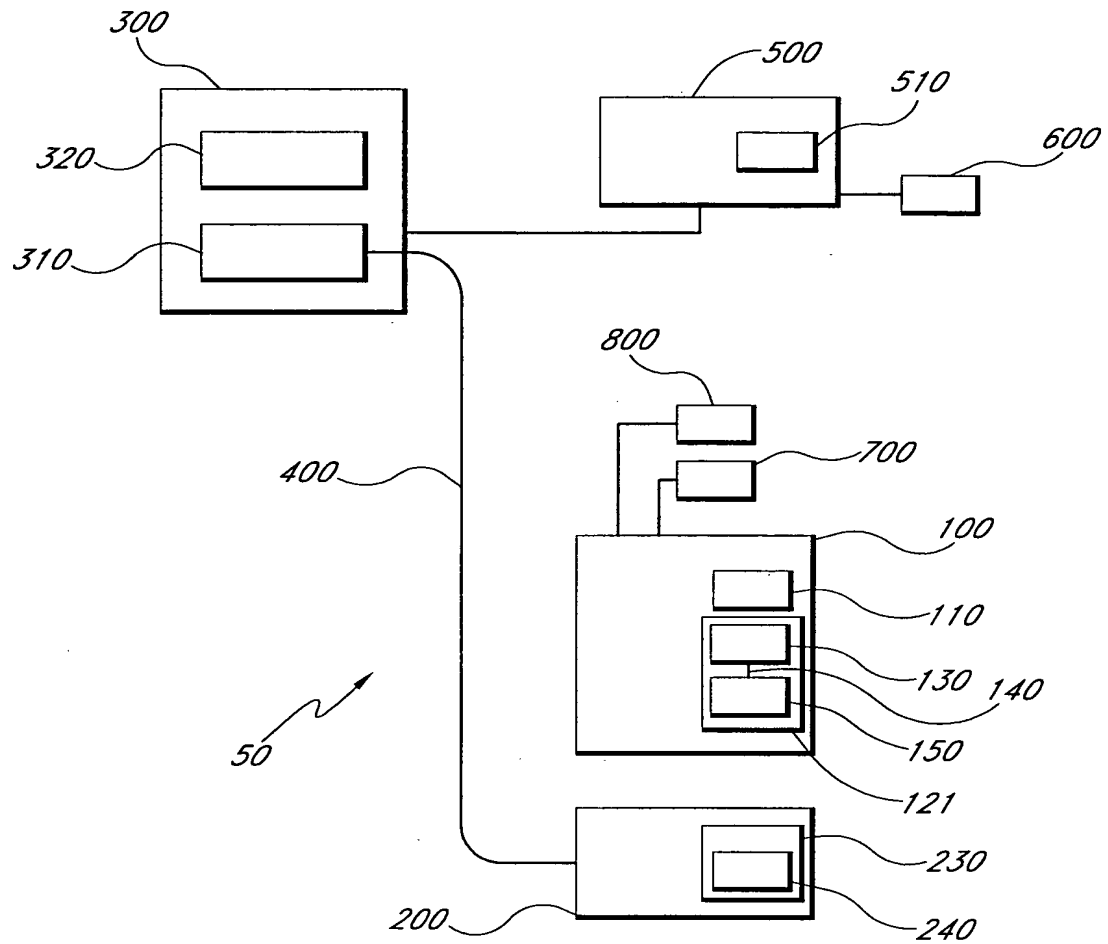


FIG. 1

2/31

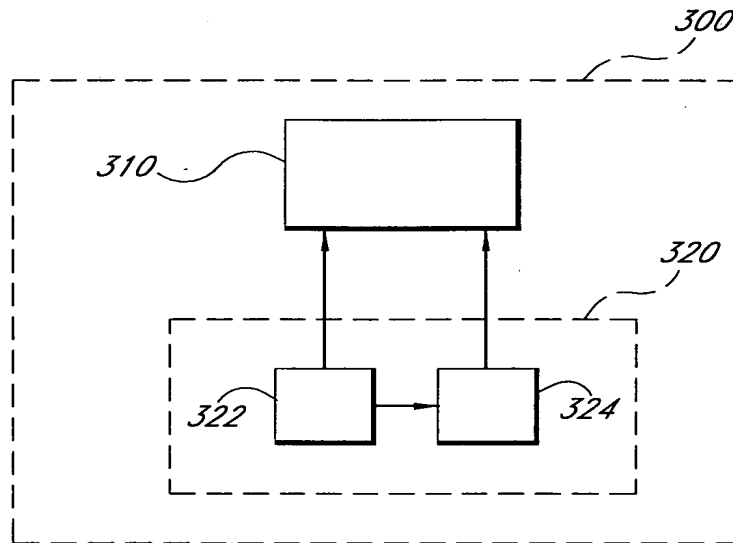
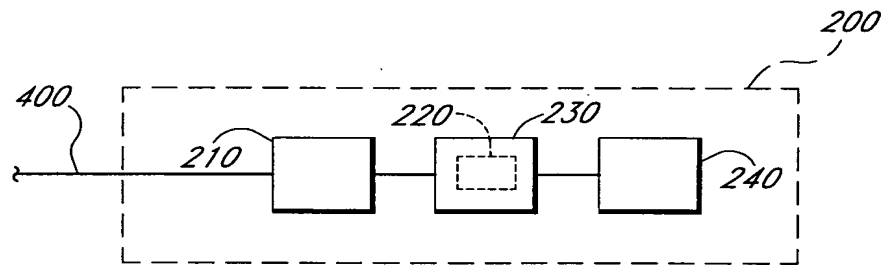


FIG. 2

3/31



*FIG. 3A*

4/31

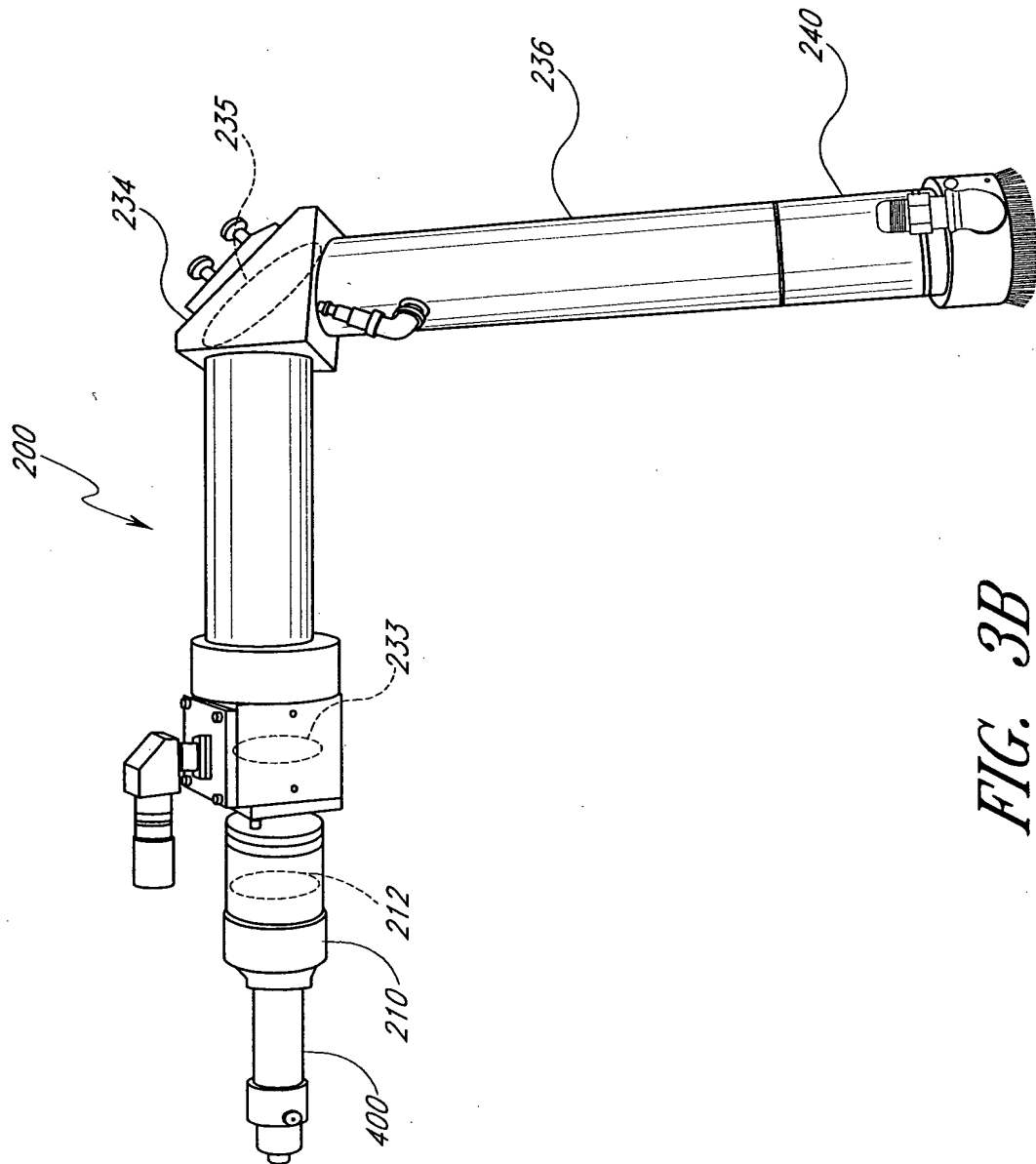


FIG. 3B

5/31

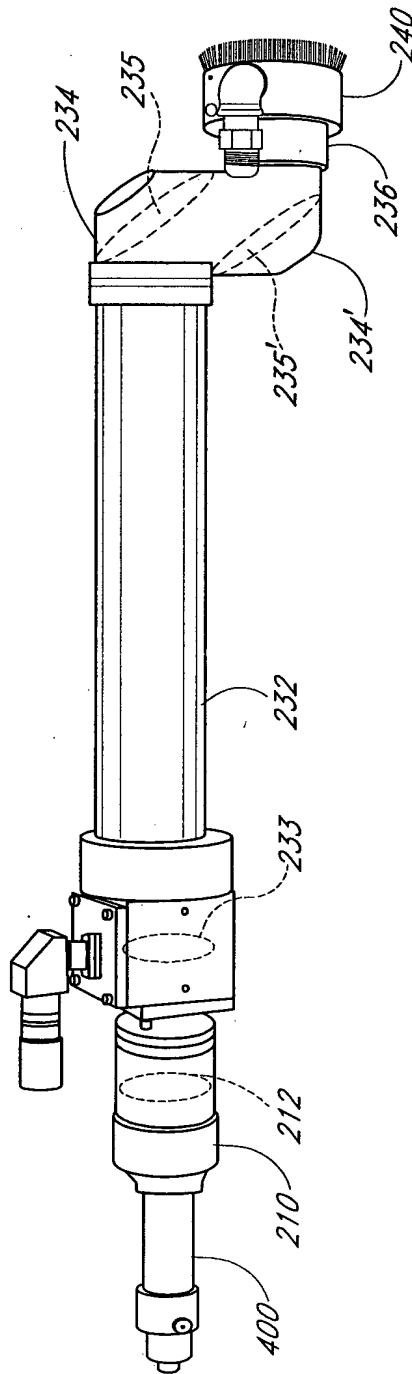


FIG. 3C

6/31

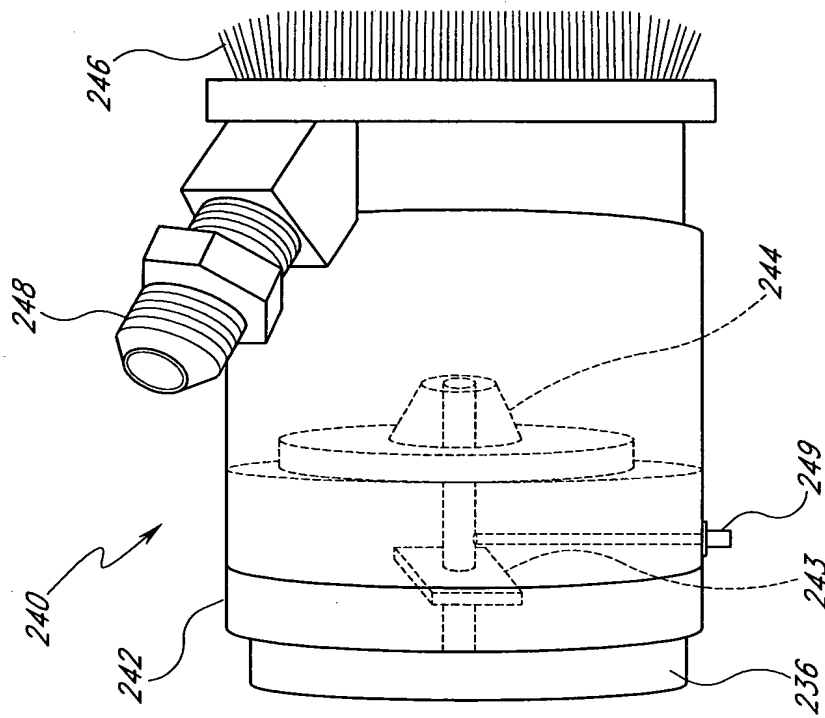


FIG. 4

7/31

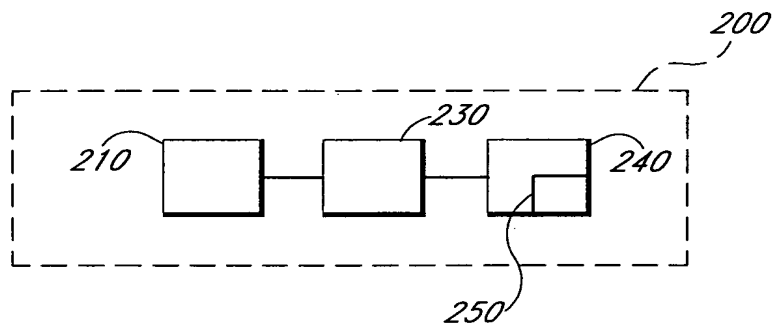


FIG. 5

8/31

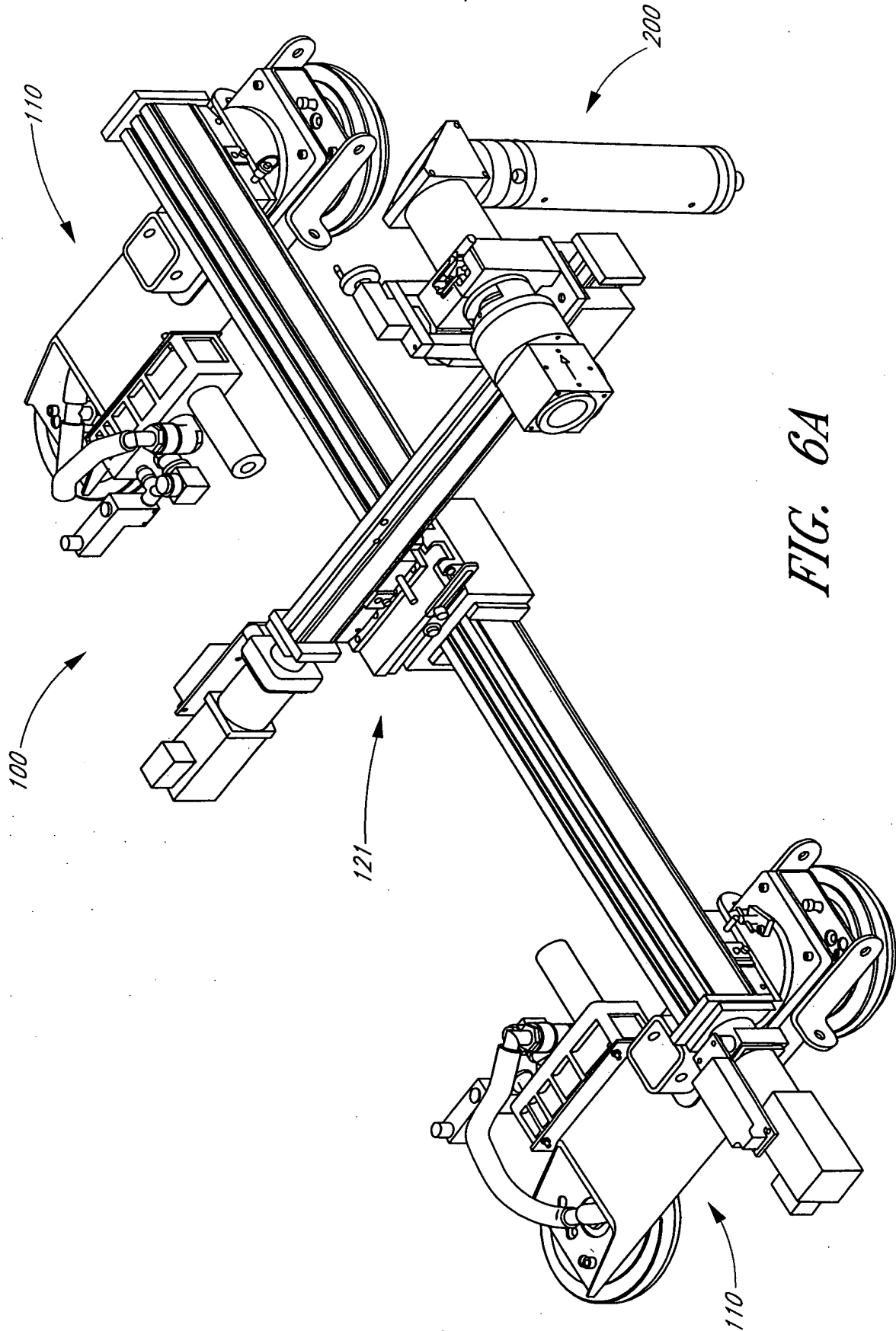


FIG. 6A



9/31

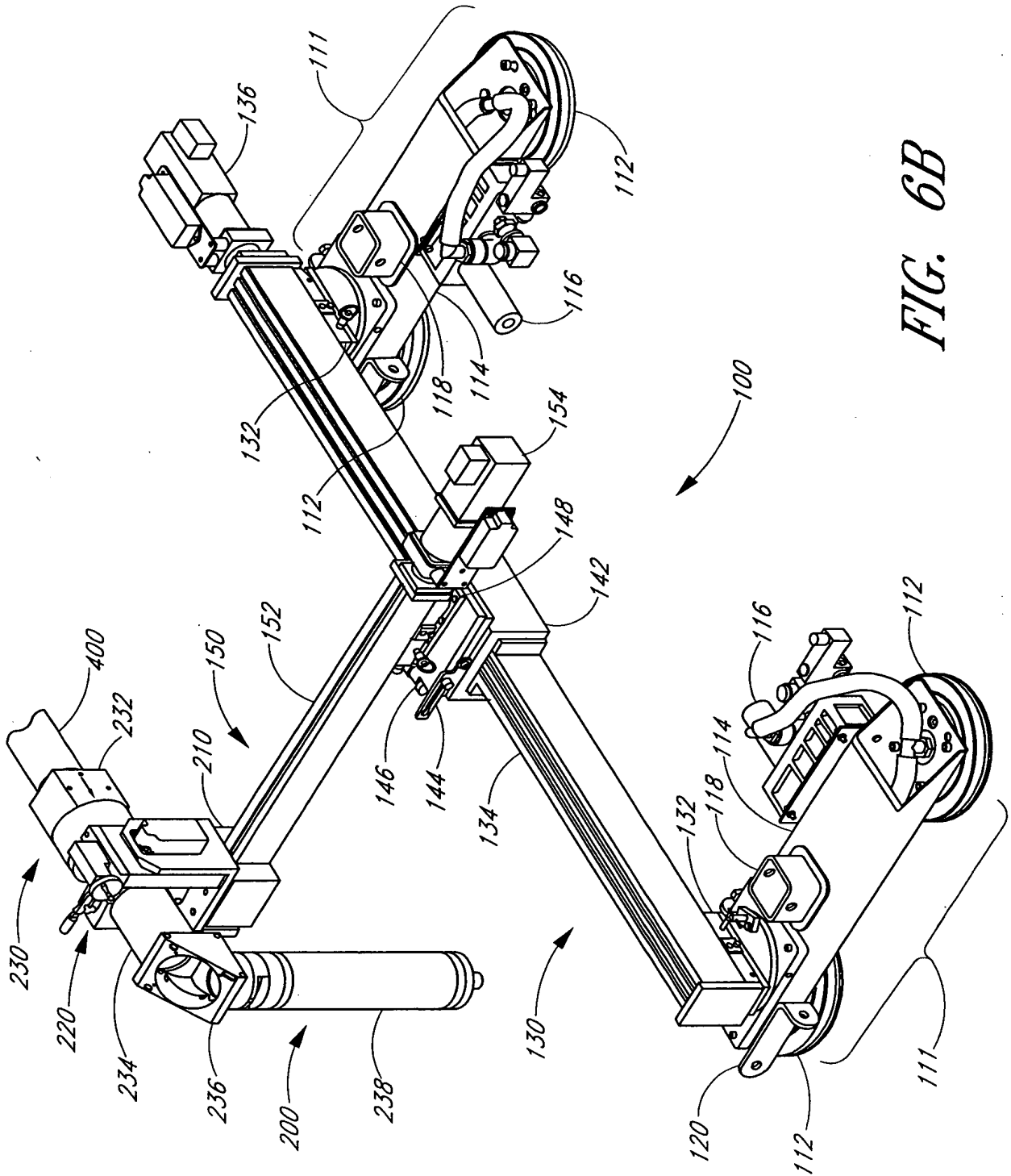
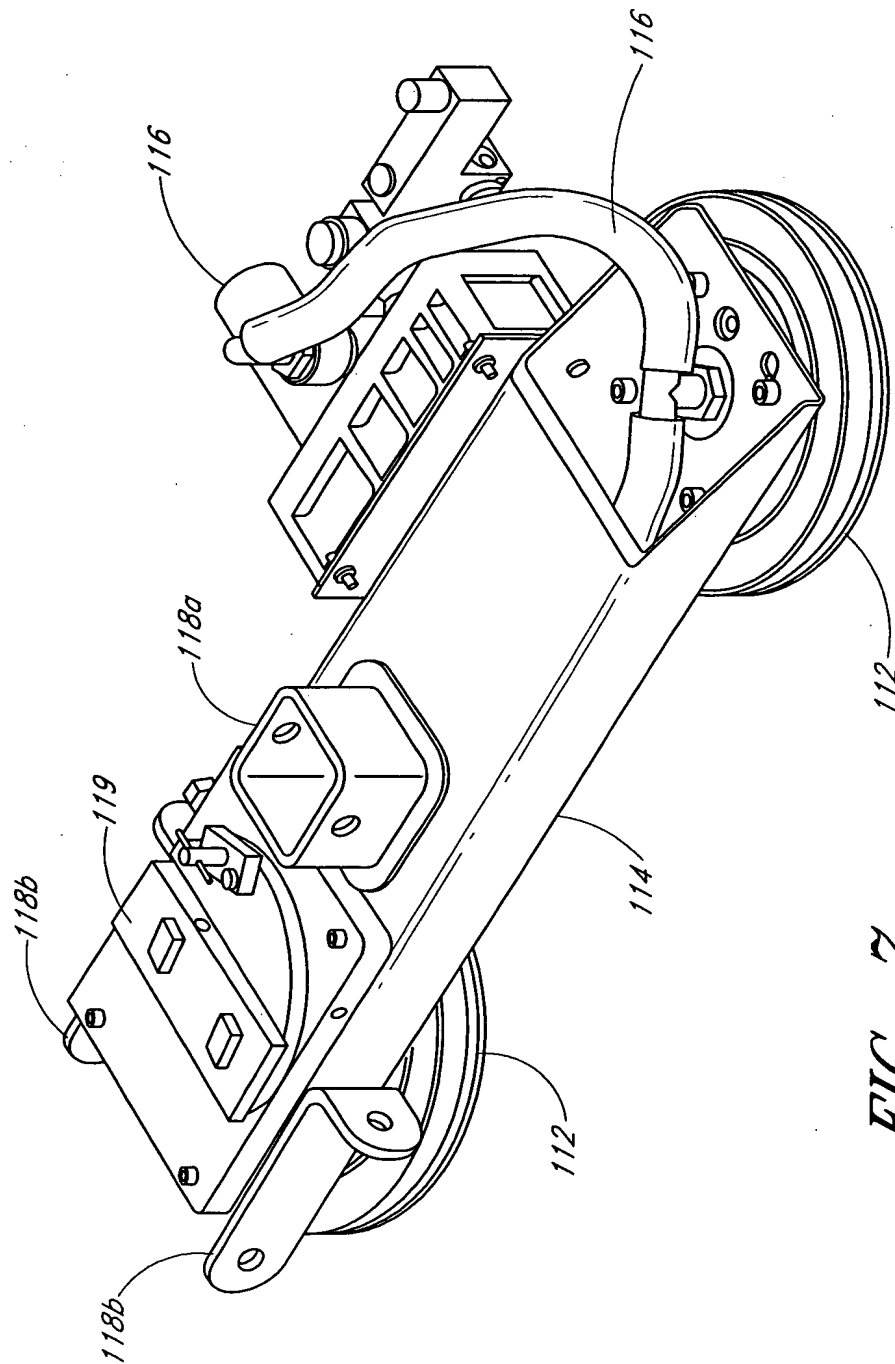
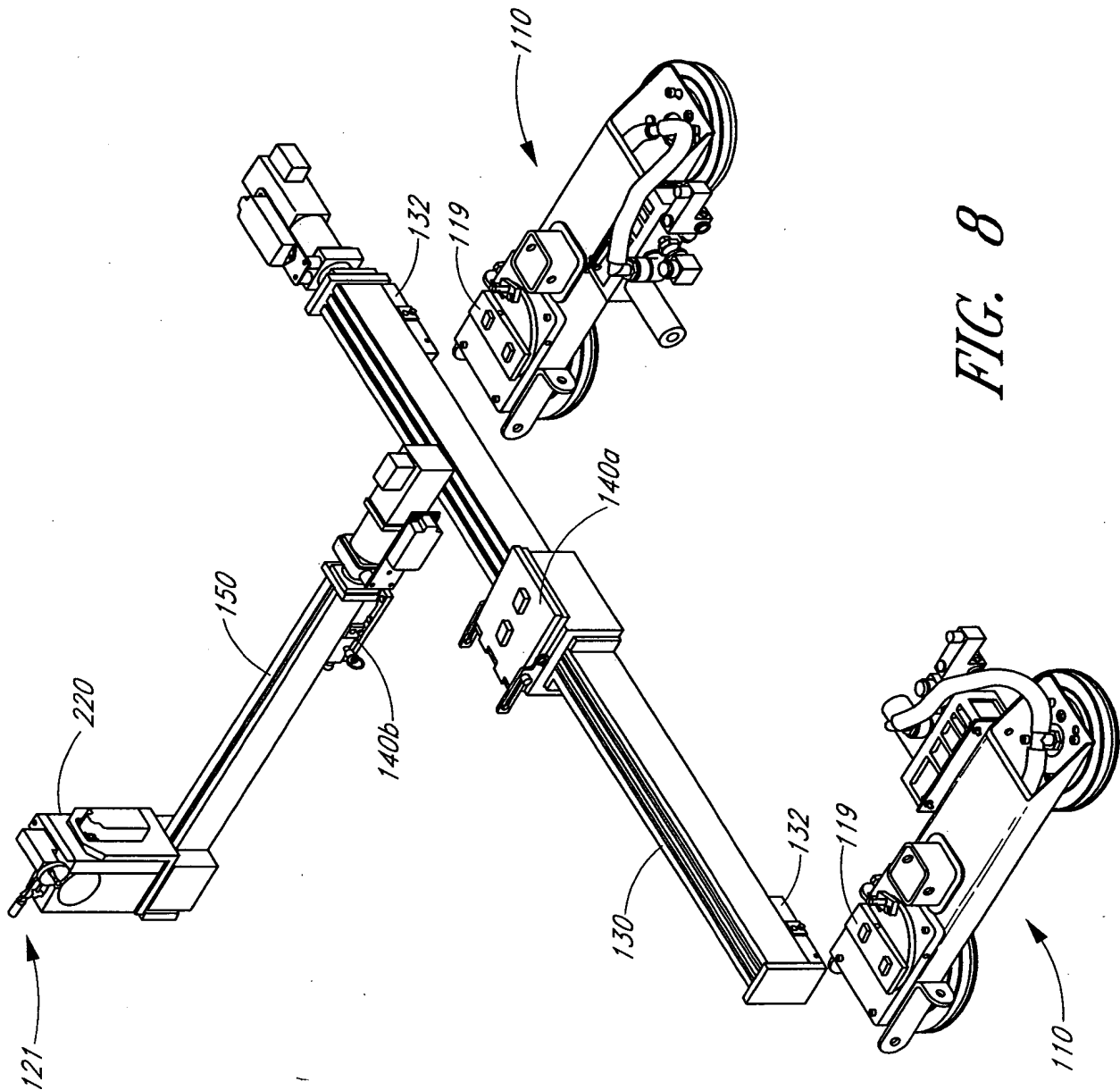


FIG. 6B

10/31



11/31



12/31

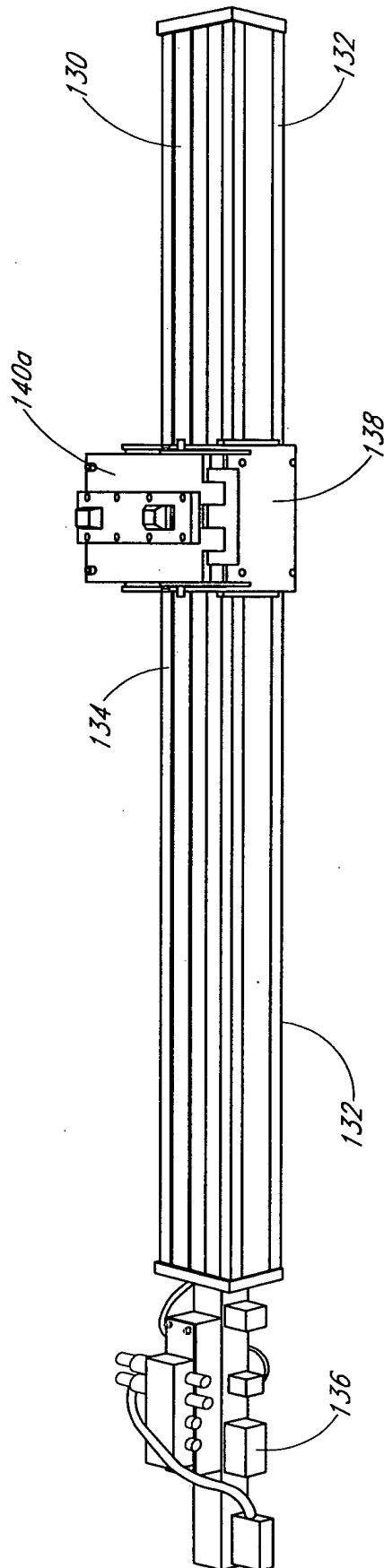


FIG. 9

13/31

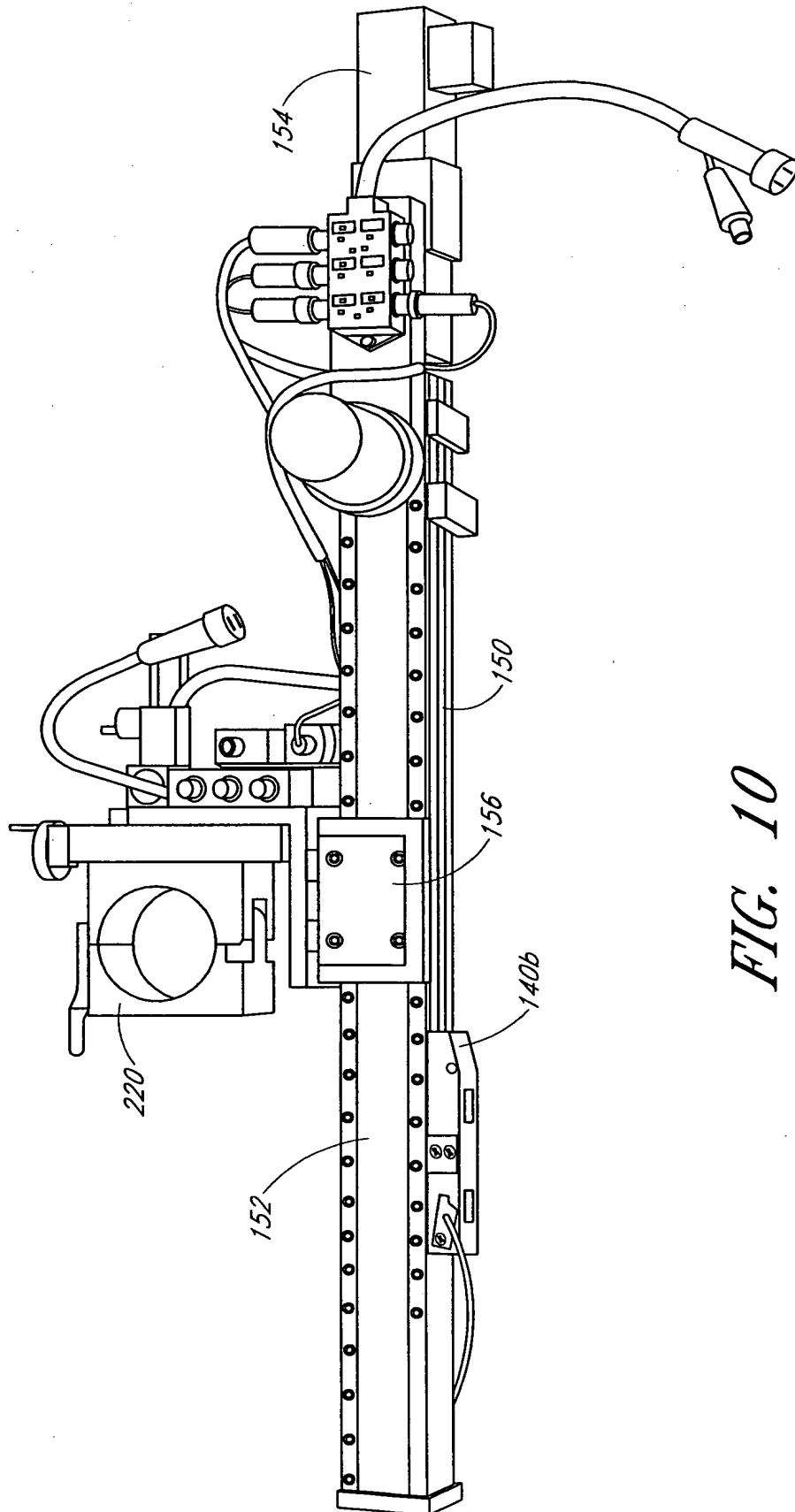
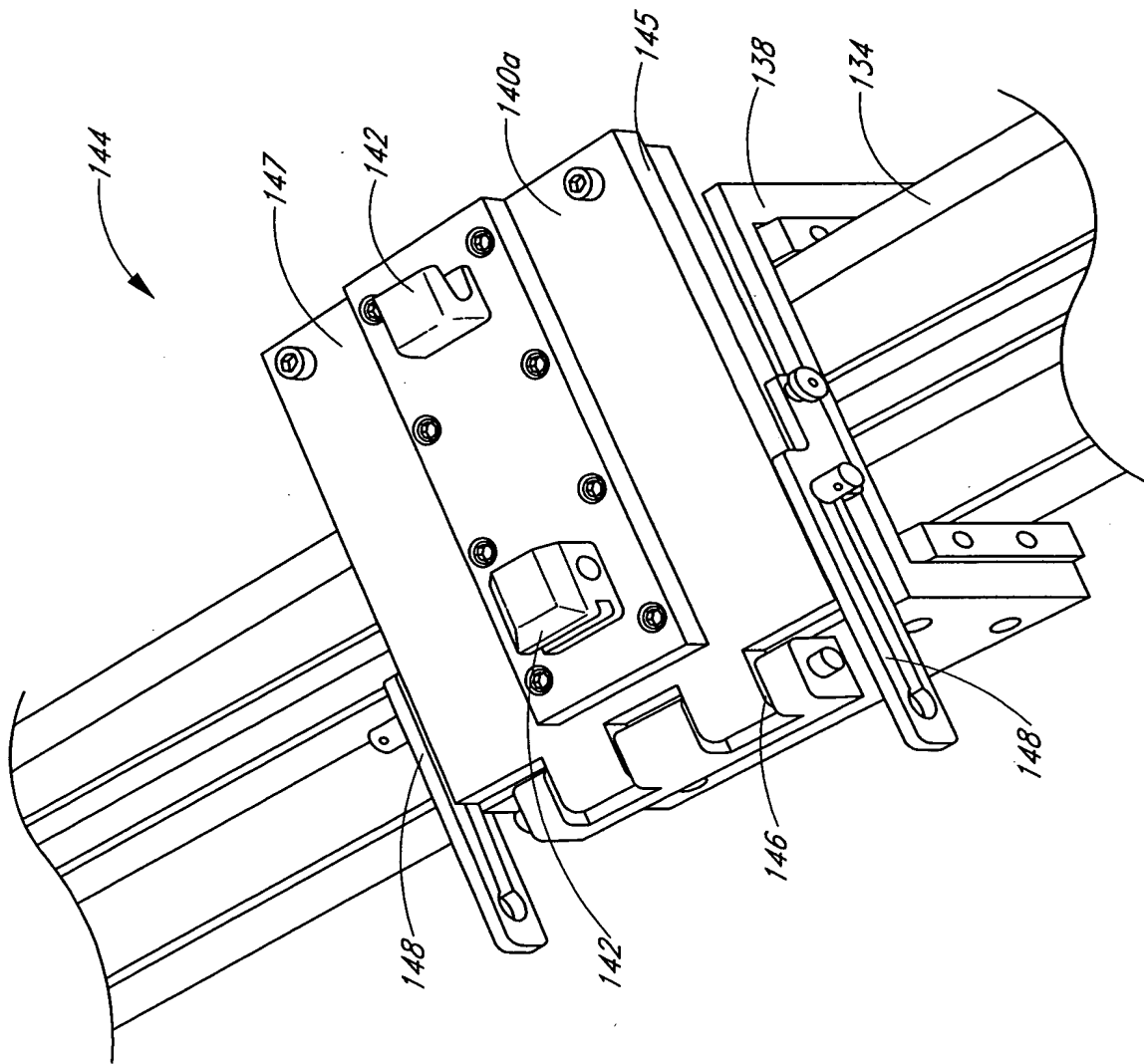
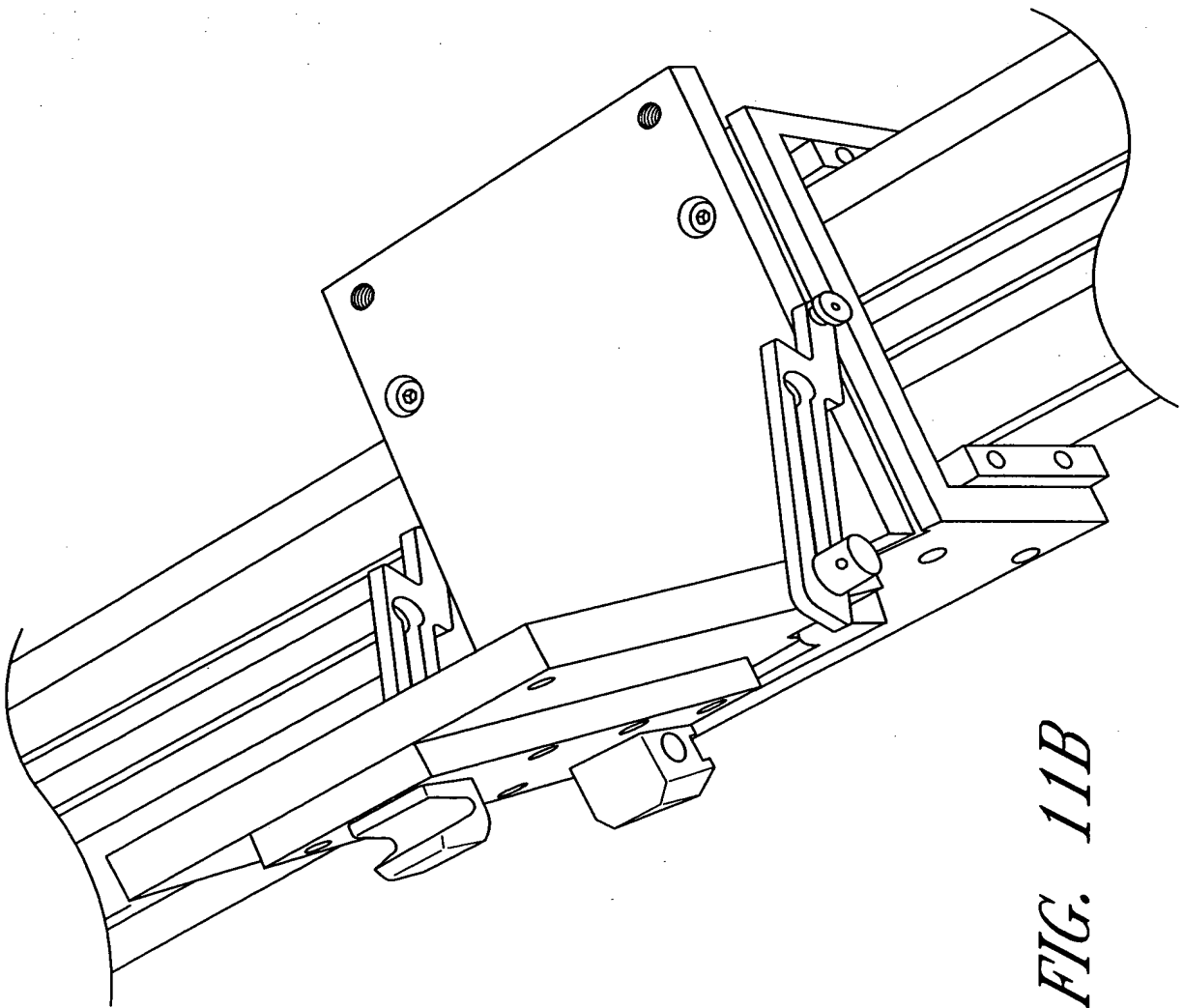


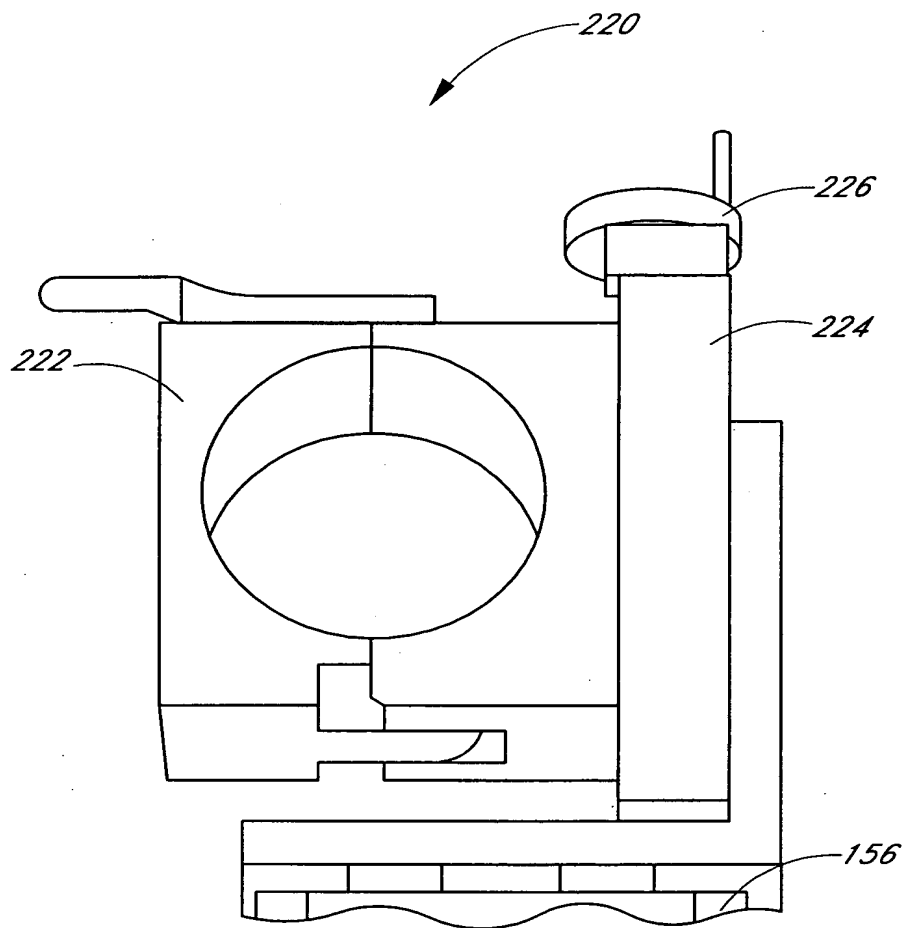
FIG. 11A



15/31



16/31



*FIG. 12*



17/31

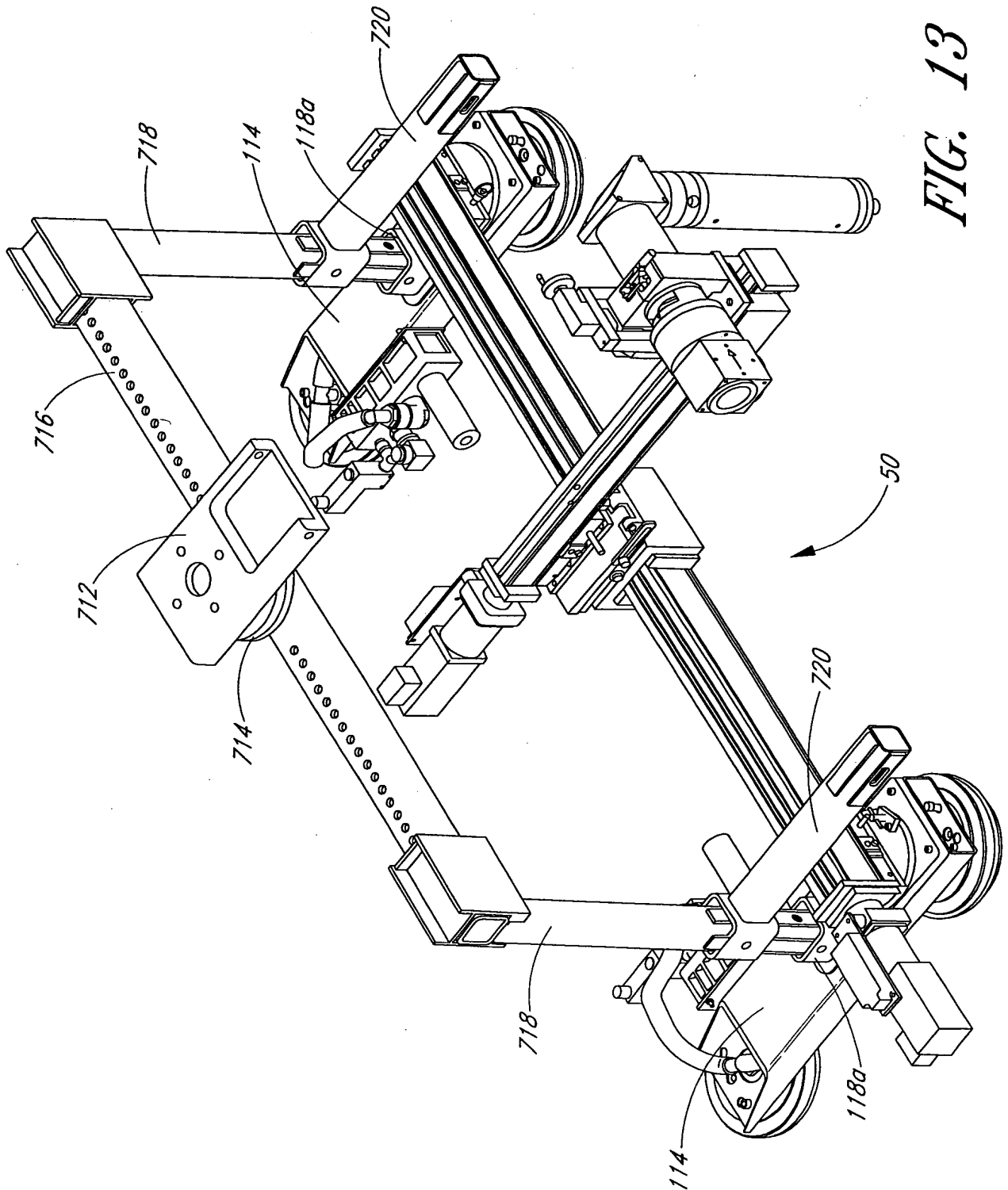


FIG. 13

18/31

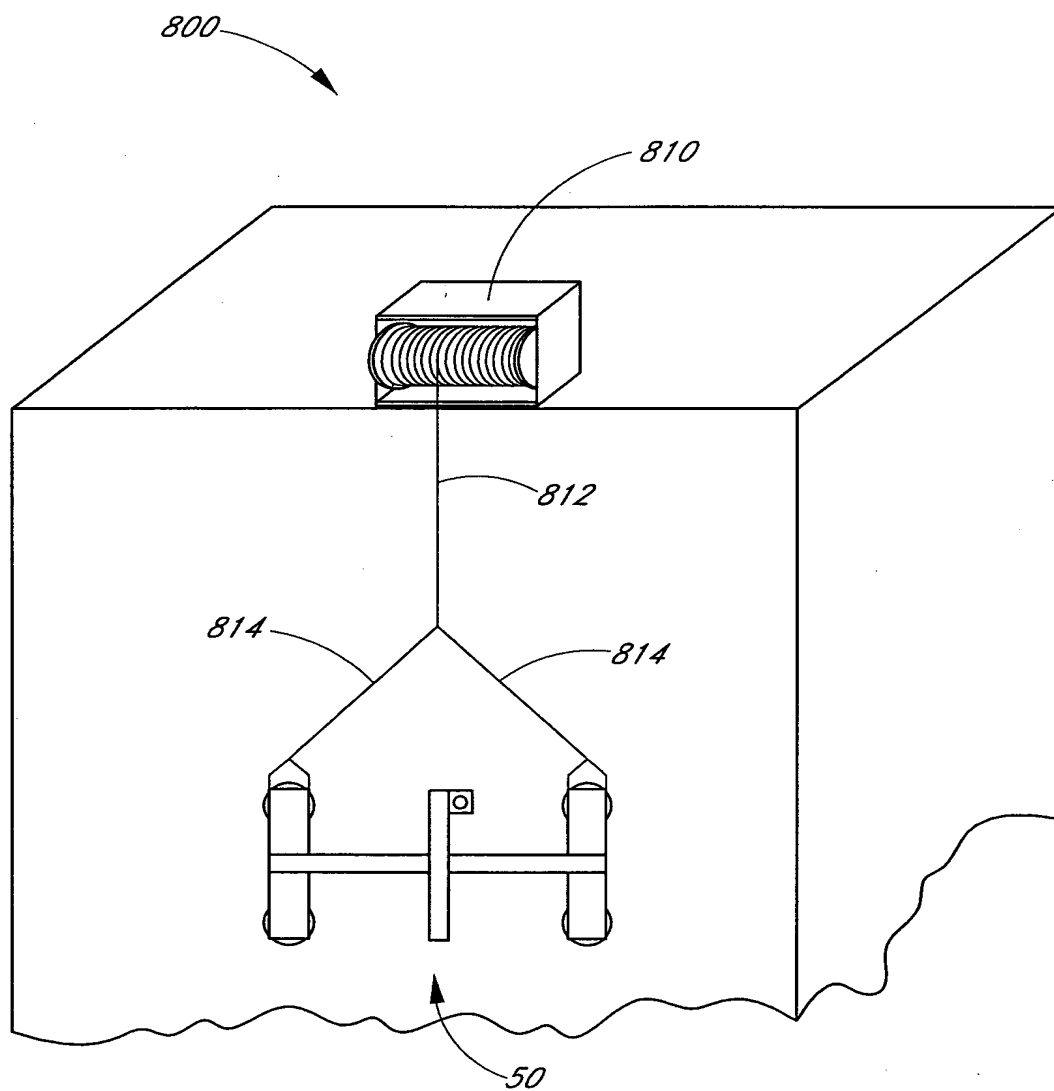


FIG. 14A

19/31

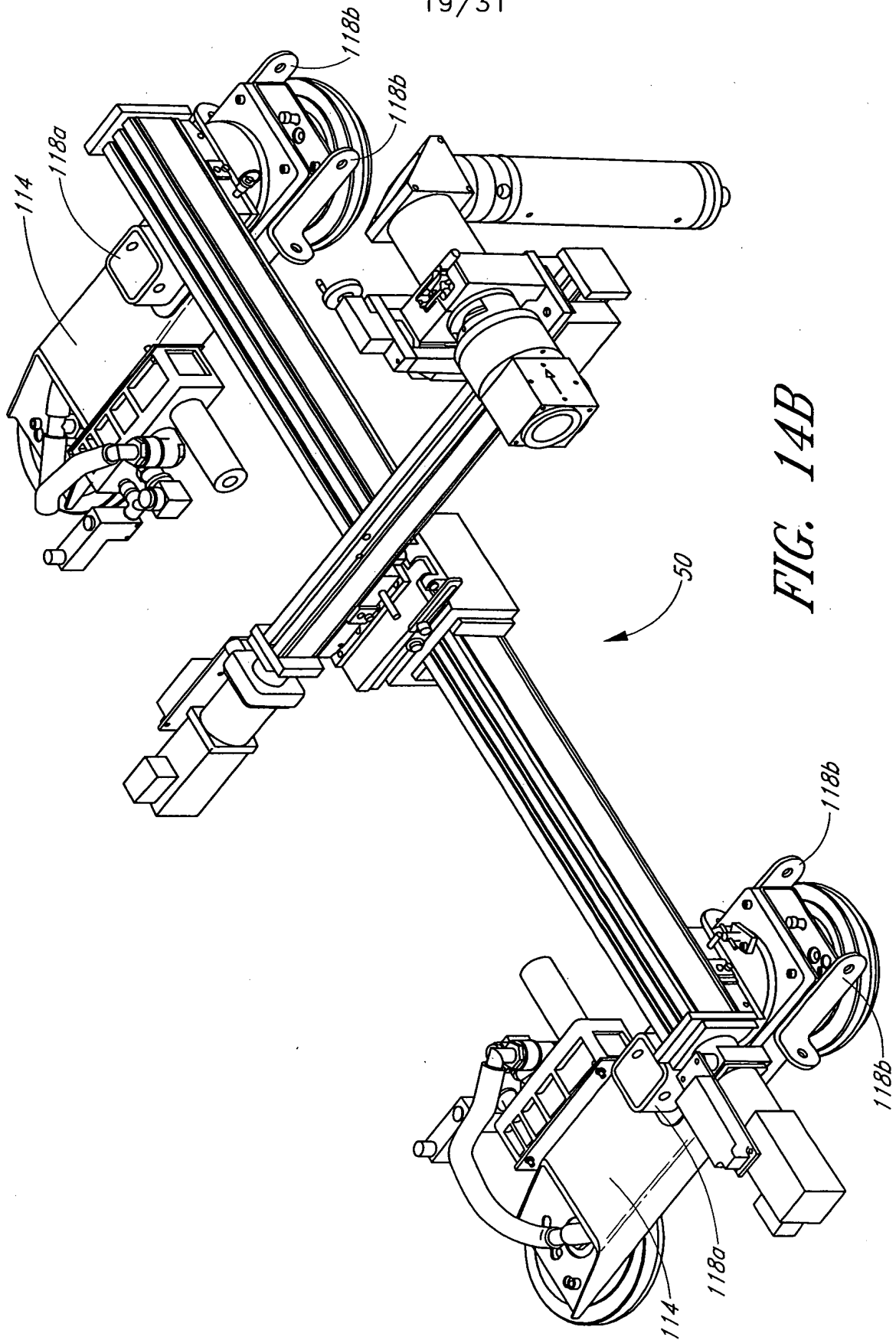


FIG. 14B

20/31

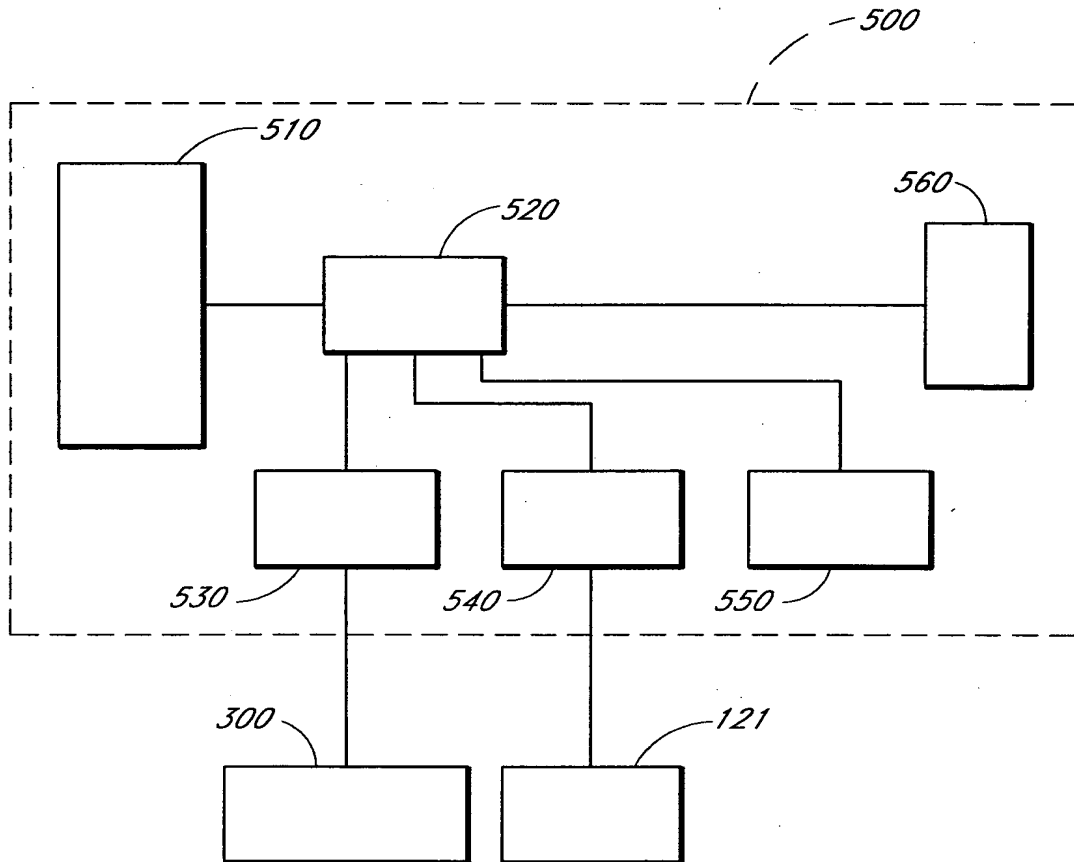


FIG. 15

21/31

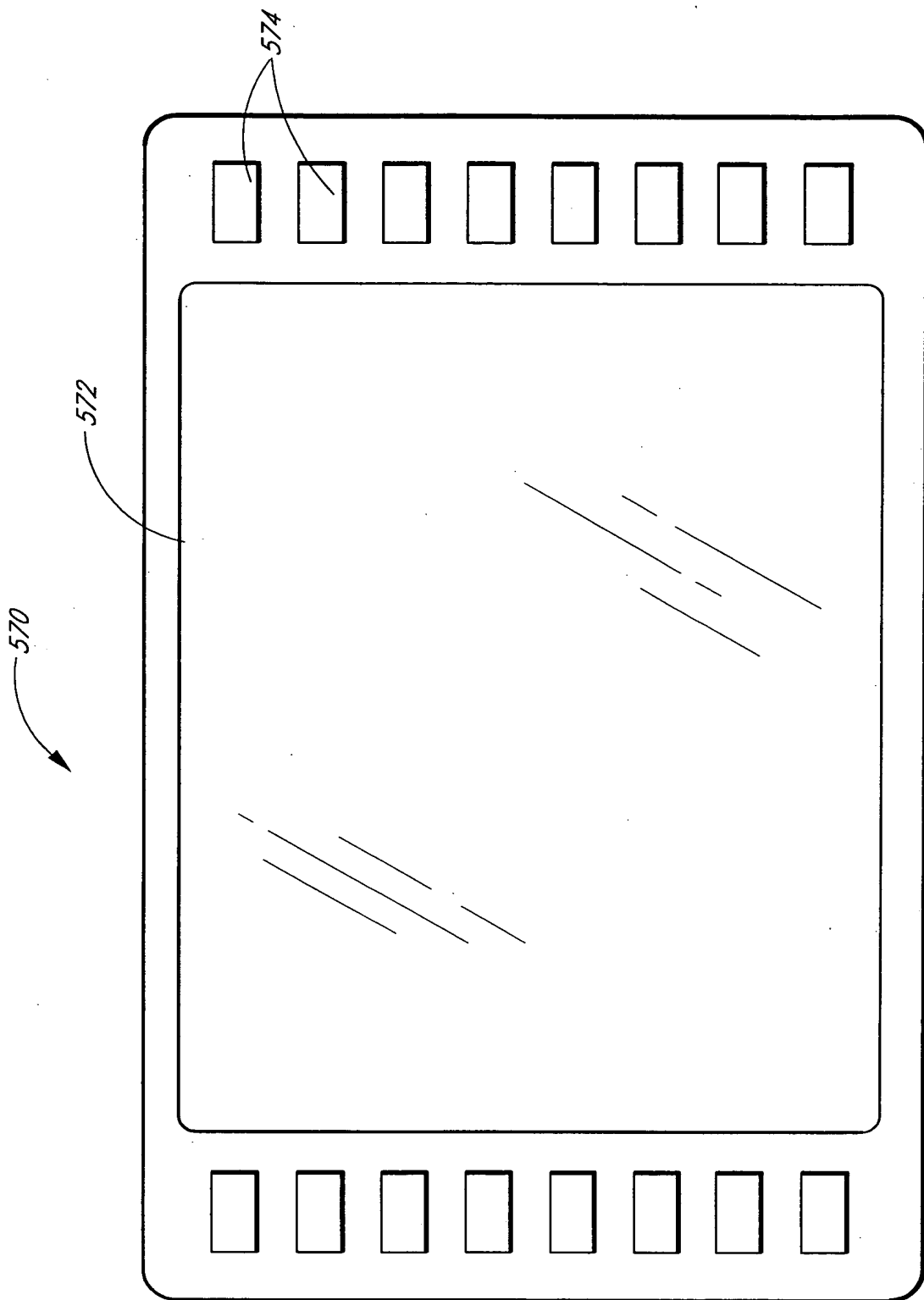


FIG. 16

22/31

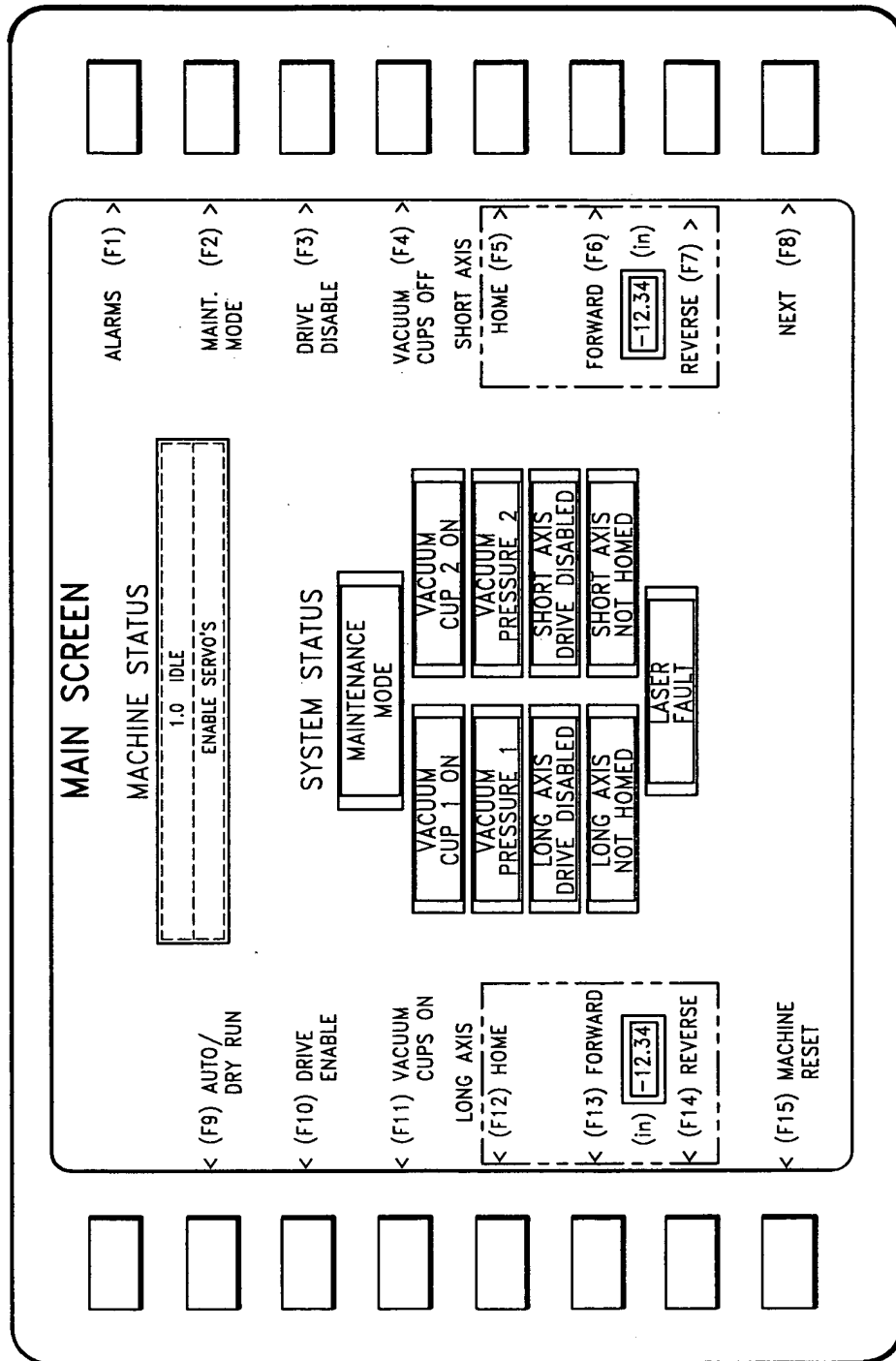


FIG. 17A

23/31

## SELECT OPERATION SCREEN

< (F9) AUTO/  
DRY RUN

< (F11) CIRCLE

< (F12) PIERCE

< (F13) STRAIGHT CUT

< (F14) SURFACE  
KEYING

< (F15) MACHINE  
RESET

MACHINE STATUS

1.0 IDLE  
 ENABLE SERVO'S

LONG AXIS  
POSITION

-12.34 (in)

SHORT AXIS  
POSITION

-12.34 (in)

SYSTEM STATUS

MAINTENANCE  
MODE

CIRCLE  
IDLE

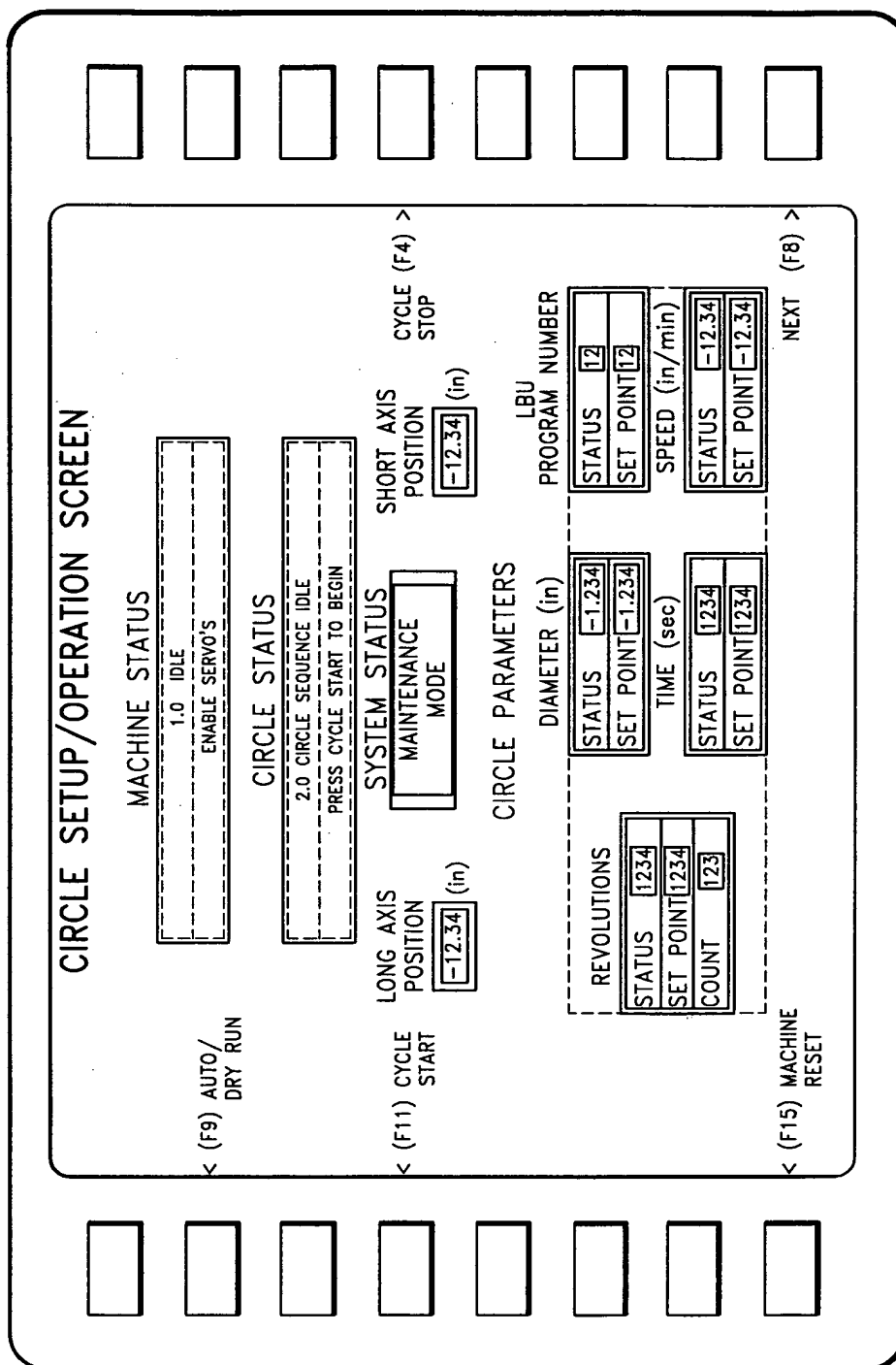
PIERCE  
IDLE

STRAIGHT CUT  
IDLE

SURFACE KEYING  
IDLE

NEXT (F8) >

FIG. 17B





**FIG. 17D**

26/31

**CUT SETUP/OPERATION SCREEN**

**MACHINE STATUS**

1.0 IDLE

ENABLE SERVO'S

**CUT STATUS**

4.0 CUT SEQUENCE IDLE

PRESS CYCLE START TO BEGIN

**SYSTEM STATUS**

MAINTENANCE  
MODE

**CUT PARAMETERS**

**LONG AXIS POSITION**

-12.34 (in)

**SHORT AXIS POSITION**

-12.34 (in)

**SPEED (in/min)**

**LONG AXIS**

STATUS -12.34

SET POINT -12.34

**SHORT AXIS**

STATUS -12.34

SET POINT -12.34

**LENGTH (in)**

STATUS -12.34

SET POINT -12.34

**PROGRAM NUMBER**

STATUS 12

SET POINT 12

**LONG AXIS**

STATUS -12.34

SET POINT -12.34

**LONG AXIS**

NOT SELECTED

**SHORT AXIS**

NOT SELECTED

**LONG AXIS**

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**SHORT AXIS**

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**LONG AXIS**

27/31

## SURFACE KEYING SETUP/OPERATION SCREEN

MACHINE STATUS

1.0 IDLE  
ENABLE SERVO'S

SURFACE KEYING STATUS

5.0 KEYING SEQUENCE IDLE  
PRESS CYCLE START TO BEGIN

SYSTEM STATUS

MAINTENANCE  
MODE

SURFACE KEYING PARAMETERS

LONG AXIS POSITION

[-12.34] (in)

SHORT AXIS POSITION

[-12.34] (in)

LONG AXIS LENGTH (in)

STATUS [-12.34]  
SET POINT [-12.34]

SHORT AXIS LENGTH (in)

STATUS [-12.34]  
SET POINT [-12.34]

SPEED (in/min)

STATUS [-12.34]  
SET POINT [-12.34]

OFFSET (in)

STATUS [-12.34]  
SET POINT [-12.34]

PROGRAM NUMBER

STATUS 12  
SET POINT 12

NEXT (F8) >

< (F9) AUTO/ DRY RUN

< (F11) CYCLE START

< (F15) MACHINE RESET

CYCLE (F4) >  
STOP

FIG. 17F

RETURN (F1) >
ACK ALL (F3) >

< (F9) AUTO/  
DRY RUN
< (F15) MACHINE  
RESET

mm/dd/yy

Trig

Message

NEXT (F8) >

FIG. 17G

29/31

## MAINTENANCE SCREEN

WARNING:  
OPERATION FROM THIS SCREEN  
BYPASSES SYSTEM INTERLOCKS

SYSTEM STATUS

MAINTENANCE  
MODE

VACUUM  
CUP 1 ON

VACUUM  
CUP 2 ON

VACUUM  
PRESSURE 1

VACUUM  
PRESSURE 2

LONG AXIS  
DRIVE DISABLED

SHORT AXIS  
DRIVE DISABLED

LASER AIR  
SOLENOID OFF

LASER AIR  
PRESSURE

LONG AXIS  
NOT HOMED

SHORT AXIS  
NOT HOMED

LASER  
FAULT

JOG SPEED  
(in/min)

STATUS -12.34

SET POINT -12.34

< (F9) AUTO/  
DRY RUN

< (F10) DRIVE  
ENABLE

< (F11) VACUUM  
CUPS ON

LONG AXIS  
< (F12) HOME

< (F13) FORWARD  
(in) -12.34

< (F14) REVERSE  
(in) -12.34

< (F15) MACHINE  
RESET

ALARMS (F1) >

LASER AIR (F2) >  
ON/OFF

DRIVE (F3) >  
DISABLE

VACUUM (F4) >  
CUPS OFF

SHORT AXIS  
HOME (F5) >

FORWARD (F6) >  
(in) -12.34

REVERSE (F7) >  
(in) -12.34

NEXT (F8) >

FIG. 17H

30/31

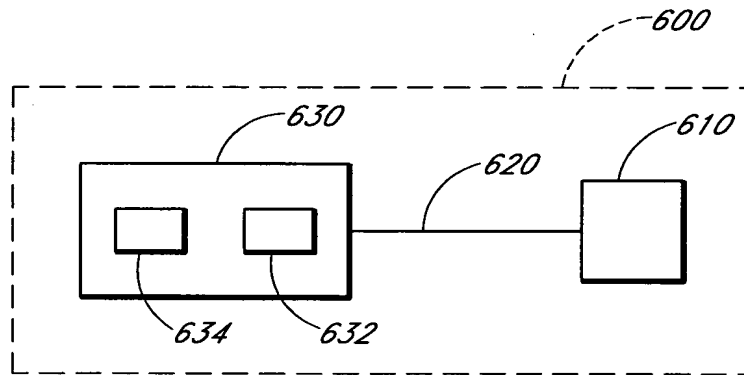


FIG. 18

31/31

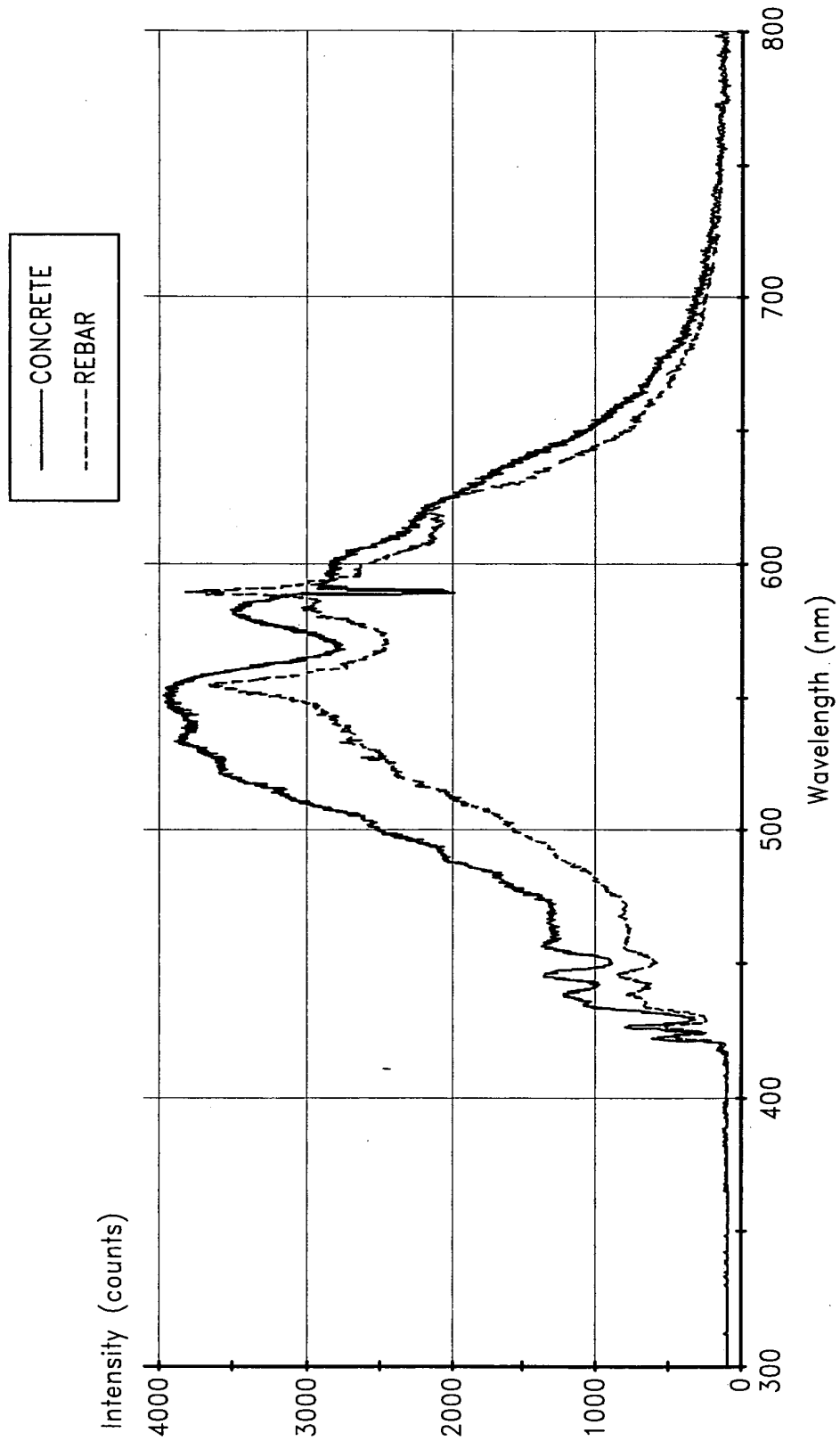


FIG. 19